

REMARKS

The Examiner's action and the grounds for rejection set forth therein have been very carefully considered and the claims have been amended accordingly. Initially, applicant gratefully acknowledges the Examiner's statement that he agrees that the cams of the instant application project in a very different manner from the cam ring than the cams of Horimoto. It remains, therefore, to clearly express the differences between the instant application and Horimoto in the claims. To achieve this end, applicant has amended claim 6 and submits new claims 11-15, all of which applicant submits, define patentable subject matter over Horimoto.

Referring first to amended claim 6, the claim has been amended to take into account a connector having "at least one outside diameter" and recites "said cams projecting radially beyond the only or largest outside diameter of the cylindrical hose connector." Thus, the claim requires, whether the connector has one or multiple outside diameters, that the cams project radially beyond the only or largest outside diameter of the cylindrical hose connector. In view of the present claim limitations, the Examiner is no longer free to compare the radial projection of the cams with just any diameter of the cylindrical hose connector. Rather, he must, in applying Horimoto, which discloses multiple outside diameters, compare the radial projection of the cams with the largest outside diameter of the cylindrical hose connector. It will be appreciated that, when this is done, Horimoto does not disclose a coupling wherein the cams project radially beyond the largest diameter of the cylindrical hose connector. Therefore, Horimoto does not anticipate claim 6 within the meaning of 35 USC 102(b).

Moreover, it should be clear that the configuration described by the specification and illustrated in the drawings of the instant application is far superior to the configuration of Horimoto, at least in terms of their respective abilities to connect facing coupling members when the gap between two adjacent cams on a coupling member becomes clogged with dirt (a situation that not infrequently arises due to the manner in which such coupling members are used by emergency responders). Because of the arrangement of the cams in the present invention, recited in currently amended claim 6 as a "cam ring having a plurality of integral cams arranged on the periphery of the cam ring and projecting from the cam ring in a radial direction, **said cams**

projecting radially beyond the only or largest outside diameter of the cylindrical hose attachment connector for defining the largest outside diameter of said coupling,” the end faces of the cams on one coupling member facing a respective other coupling member stay free from any part of the other respective coupling member when connected. This means that any dirt stuck in the gap between two neighboring cams is automatically pushed outside of the coupling members when engaging the cams to facilitate connection of the coupling members, and thus the lengths of hose attached thereto. However, the situation is entirely different in the hose coupling disclosed in Horimoto. In all embodiments shown in Horimoto, the cams are arranged on the end surface of the cam ring facing the respective other coupling half and do not project radially beyond the only or largest outside diameter of the connector. Therefore, any dirt in the gap between two neighboring cams would be pushed against the cam ring and remain in the gap when inserting the cams of the other coupling half, thus rendering insertion of the cams, and coupling of the hoses, impossible. The couplings disclosed in Horimoto must, therefore, be cleaned before the coupling members are coupled to each other. In an emergency situation, where time is of the essence, this takes far too long and is thus not a practical solution for a hose coupling. There is no disclosure in Horimoto teaching or suggesting this claimed feature of the connector of the present application and, therefore, Horimoto cannot be seen to render obvious this feature of amended claim 6 or the advantages flowing therefrom.

Referring now to new claim 11, it will be appreciated that this claim explicitly defines that the cam ring has an end face and a peripheral surface and that the cams are arranged on the peripheral surface. While the claims of Horimoto are arranged on the end face of the cam ring, the cams of the present invention are arranged on the peripheral surface, which is understood as being the circumferential surface of the cam ring. Accordingly, Horimoto neither anticipates nor renders obvious the features of new claim 11.

Turning now to new claim 12, the claim specifies that the cam ring has a radially inner surface and a radially outer surface and that the cams which are arranged on the radially outer surface of the cam ring also have a radially inner surface and a radially outer surface. The cams are arranged with their radially inner surfaces integral with the radially outer surface of the cam ring. While the Horimoto cams also have a radially inner surface and a radially outer surface,

and the Horimoto cam ring has a radially inner surface and a radially outer surface, the Horimoto cams are not attached with their radially inner surfaces integral with the radially outer surface of the cam ring. Accordingly, Horimoto neither anticipates nor renders obvious the features of new claim 12.

New claim 13, like new claim 11, specifies that the cam ring has an end surface and a peripheral surface. However, new claim 13 further includes the feature that the cams are integrally formed with the cam ring and each have a cam head (as is originally disclosed on page 5, line 6 of the specification and is shown in Figure 6). The cam head is the end surface of the cam. When the cams of the coupling member engage into each other during coupling, in accordance with the present invention, the cam heads stay free, the cam heads of each coupling member overlap the cam ring of the other coupling member and the end surfaces of the cam rings face each other. By contrast, the cam heads of the Horimoto coupling do not stay free when coupled and they do not overlap the other coupling member. In Horimoto, the end faces of the sealing surface carrying members 5 in Figure 9 face each other, but the end surfaces of the cam rings do not. The sealing surface carrying member 5 is screwed on an inner surface of connector tube main body 3 and is, thus, not an integral part of the connector. Accordingly, Horimoto neither anticipates nor renders obvious the features of new claim 13.

New claim 14 specifies that the cam ring has a periphery and that the periphery comprises an end surface and an outside circumference. It further recites that the plurality of integral cams are arranged on the outside circumference. On the other hand, the Horimoto connector, while also having a periphery comprising an end surface and an outside circumference, arranges the plurality of integral cams on the end surface and not on the outside circumference. Accordingly, Horimoto neither anticipates nor renders obvious the features of new claim 14.

Referring to new claim 15, the claim specifies that the largest outside diameter of the coupling defined by the cams is larger than the outside diameter of the connector by the radial dimension of the cams. This is disclosed at page 2, lines 11-13 and in Figure 2 of the instant application. There is no comparable teaching in Horimoto. Even if the outside diameter of the connector of Horimoto is taken as being the outside diameter formed by the bottoms of the slots,

the outside diameter defined by the cams is certainly not larger by an amount equal to the radial dimension of the cams. On the other hand, Figure 2 of the instant application shows clearly that the outside diameter of the instant connector, as defined by the cams, is larger than the outside diameter of the cam ring or the connector by the radial dimension of the cams. Accordingly, Horimoto neither anticipates nor renders obvious the features of new claim 15.

Claim 10 of the instant application, which stands rejected 35 USC 103(a) as unpatentable over Horimoto is, in fact, allowable at least because it depends from allowable amended claim 6.

For the foregoing reasons, it is respectfully submitted that the rejections under 35 USC 102(b) and 35 USC 103(a) over Horimoto should be reconsidered and withdrawn in light of amended claim 6 and newly submitted claims 11-15 and that an early notice of allowance issue directed to pending claims 6-8 and 10-15. It appears that applicant and the Examiner are in agreement that this application contains allowable subject matter. It is, therefore, incumbent upon both applicant and the Examiner to expedite the prosecution of this application by identifying the allowable subject matter and by working together to incorporate suitable limitations into the claims. Accordingly, should the Examiner not find any of the five independent claims submitted herewith to be allowable, it is respectfully requested that the Examiner telephone undersigned counsel to discuss the limitations which he believes would place the claims in condition for acceptance.

Respectfully submitted,

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